



Free Special Education Resources, Consultation, Trainings Your Arizona Parent School Connection

Traumatic Brain Injury

What is Traumatic Brain Injury ?

Arizona Revised Statutes (ARS) §15-761(39) states: “Traumatic brain injury’: (a) Means an acquired injury to the brain that is caused by an external physical force and that results in total or partial functional disability or psychosocial impairment, or both, that adversely affects educational performance, (b) Applies to open or closed head injuries resulting in mild, moderate, or severe impairments in one or more areas, including cognition, language, memory, attention, reasoning, abstract thinking, judgment, problem solving, sensory, perceptual and motor abilities, psychosocial behavior, physical functions, information processing, and speech, (c) Does not include brain injuries that are congenital or degenerative or brain injuries induced by birth trauma.”

Two types of conditions qualify under the federal definition for closed or open head injury: 1) direct damage to the brain as a result of physical injury; or 2) damage due to bleeding, swelling, or infection resulting from trauma to the head.

The observed deficits of traumatic brain injury (TBI) may be grouped in four major areas: physical, cognitive, social, behavioral, emotional, and executive functioning (planning, organizing). Depending on the part of the brain injured and the individual’s age at the time of the injury, problems may not be evident until years later.

Typically, in medical usage, traumatic brain injury refers to the *event* of the injury rather than the *outcome*. Under the Individuals with Disabilities Education Act (IDEA), traumatic brain injury refers to the student’s *functioning* and *performance* as a result of the injury. A student is determined eligible for special education services

if: 1) the criteria of the federal definition of a student with a traumatic brain injury is met, and 2) the multidisciplinary evaluation team determines that the head injury adversely affects a student’s educational performance. The student may still qualify as disabled under Section 504 of the Rehab Act of 1973.

How Common are Traumatic Brain Injuries?

In the 2006–07 school year, 454 Arizona students were classified as having traumatic brain injury and received special education service. This number represents 0.04 % of the 1,112,610 students enrolled in Arizona public schools as of October 1, 2006 and accounts for 0.37 % of the total special education population.

What Effect Does Traumatic Brain Injury Have on a Child?

Head injuries may lead to persistent symptoms, such as: memory problems, attention span problems, lack of energy, disorganization, depression, anxiety, changes in sensory perception, and social/behavioral difficulties.

Communication problems linked to TBI may include: reduced hearing acuity, reading comprehension; verbal or written expression; excessive speech; and inappropriate subject focus.

School re-entry after the trauma is important. The rehabilitation team and school personnel must work together to minimize the stress of the child returning to the classroom. A comprehensive evaluation including the possible need for assistive technology (AT) devices will be critical for providing an appropriate educational program. Since recovery from TBI can be unpredictable, the child’s program may need frequent reviews as recovery/rehabilitation occurs.

References

Brain Injury association of America, 8201 Greenboro Dr., Ste. 611, McLean, VA, 22102, 800-444-6443, www.biausa.org, of Arizona, 4250 E. Camelback Rd., Ste. K 220, Phoenix, AZ 85018, 888-305-0073, www.biaaz.org

Hoffman, C. et al. (1993). *Traumatic brain injury*. Presented at the Barrow Neurological Institute Inservice, Deer Valley, AZ.

National Dissemination Center for Children with Disabilities (NICHCY).(2000) *General information about traumatic brain injury, fact sheet # 18*. Washington, DC,www.nichcy.org

Slayden, R., MD, et al.(1992). *New disabilities: Traumatic brain injury*. Presented at the LA Conference, San Antonio, TX.

Books

Calderwood, Lynsey. (2003). *Cracked:Recovering after traumatic brain injury*. London, England: Jessica Kingsley Publisher.

Schoenbrodt, L. (ed) (2001). *Children with traumatic brain injury: A parent's guide*. Rockville MD: Woodbine House.

Senelick, R., & Dougherty, K. 2nd Ed. (2001).*Living with brain injury: A guide for families*. Florence, KY: Delmar Learning.

Organizations/Hotlines/Websites

Arizona Department of Education, Exceptional Student Services, TBI Project, 1535 W. Jefferson, Phoenix, AZ 85007, 602-364-1989, 800-352-4558

Brain Injury Resource Center, Head Injury Hotline 212 Pioneer Building, Seattle, WA 98104-2221, 206-621-8558, www.headinjury.com

Arizona Governor's Council on Spinal and Head Injuries, 10640 N. 28th Dr., Ste. B102, Phoenix, AZ 85029, 602-863-0484, www.azheadspine.org

Barrow Neurological Institute, St. Joseph's Hospital, 350 W Thomas Rd., Phoenix, AZ 85013, 602-406-3000, www.thebni.com/

Brain Injury Resource Center, www.headinjury.com

Center for Assistive Technology and Environmental Access (CATEA), 490 Tenth St., NW, Atlanta, GA 30332-0156, 404-894-4960, www.catea.org

Easter Seal Society, 800-221-6827, www.easter-seals.com

National Center for Neurogenic Communication Disorders, Bldg. #71, P.O. Box 210071, University of Arizona, Tucson, AZ 85721-0071. 520-621-1472, cnet.shs.arizona.edu

National Rehabilitation Information Center (NARIC), 4200 Forbes Blvd., Ste. 202, Lanham, MD 20706, 800-346-2742, 301-459-5900, www.naric.com

Office for Children with Special Health Care Needs, 150 N. 18th, Ste.330, Phoenix, AZ 85007, 602-542-1860, www.hs.state.az.us/phs/ocshcn

Parent Information Network, Arizona Department of Education, Exceptional Student Services, 2384 N. Steves Blvd., AZ 86004, 928-679-8102, 800-352-4558, www.azed.gov/ess/pinspals

Social Security Administration, 800-772-1213, www.ssa.gov

The contents of this publication were developed in 1995 and revised in July 2007 by Kristie Melkers, Parent Information Network Specialist with funds allocated by the U.S. Department of Education under IDEA 2004. The contents do not necessarily represent the policy of the agency, no should endorsement by the federal government be assumed. The Arizona Department of Education of the State of Arizona does not discriminate on the basis of race, religion, color, national origin, sex, disability, or age in its programs, activities or in its hiring and employment practices. If you have questions or grievances related to this policy, please contact the Administrative Services DAS at 602-542-3186. This document is in the public domain and may be freely reproduced in its current format. For more information, call the Parent Information Network at 928-679-8102 or 800-352-4558.